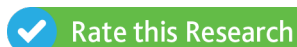


CREDIT OPINION

21 May 2021



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Seattle (City of) WA Water Enterprise

Update to credit analysis following upgrade to Aaa

Summary

[The Seattle, WA water enterprise](#) (Aaa stable) benefits from a large and wealthy service area that includes the City of Seattle, as well as neighboring communities. Although the coronavirus pandemic had significantly negative economic effects on the region, the financial effects of the coronavirus pandemic on the water enterprise were modest, with a relatively small increase in delinquencies that was easily managed. The enterprise's strong credit profile is supported by healthy financial operations characterized by sound debt service coverage and solid liquidity levels bolstered by access to the city's shared liquidity pool. Regulatory compliance and capital planning are well-managed by a strong management staff. Credit strength is further supported by an excellent rate management history.

On May 20, Moody's upgraded the water enterprise's revenue bond ratings to Aaa from Aa1.

Credit strengths

- » A large and wealthy service area that includes the City of Seattle
- » Solid debt service coverage and healthy liquidity bolstered by access to the City of Seattle's shared liquidity pool
- » Ample water supply
- » Strong management staff

Credit challenges

- » High customer utility bills relative to regional and national peers
- » Long-term trend of declining water consumption

Rating outlook

The rating outlook is stable. The utility has sufficient cash and ample access to additional liquidity to manage any near-term spikes in delinquencies should economic conditions worsen, though increases in vaccination rates and broader economic reopening makes that less likely. Affordability will be a longer-term challenge for the city as water consumption continues to decline and rates increase to pay for system operations, maintenance and improvements.

Factors that could lead to an upgrade

- » Not applicable

Factors that could lead to a downgrade

- » Deterioration in pledged revenues and coverage
- » Substantial increase in debt beyond what is expected in its capital program

Key indicators

Exhibit 1

Seattle, WA Water Enterprise					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	27 years				
System Size - O&M (in \$000s)	\$159,855				
Service Area Wealth: MFI % of US median	162.9%				
Legal Provisions					
Rate Covenant (x)	1.25				
Debt Service Reserve Requirement	DSRF funded at lesser of standard 3-prong test (Aa)				
Management					
Rate Management	Aa				
Regulatory Compliance and Capital Planning	Aaa				
Financial Strength					
	2016	2017	2018	2019	2020
Operating Revenue (\$000)	\$260,018	\$273,062	\$296,852	\$295,847	\$290,037
System Size - O&M (\$000)	\$140,672	\$148,079	\$154,756	\$163,006	\$159,855
Net Revenues (\$000)	\$119,346	\$124,982	\$142,096	\$132,841	\$130,183
Net Funded Debt (\$000)	\$834,729	\$889,038	\$845,041	\$799,312	\$750,741
Annual Debt Service (\$000)	\$79,360	\$80,139	\$78,314	\$77,911	\$73,426
Annual Debt Service Coverage (x)	1.5x	1.6x	1.8x	1.7x	1.8x
Cash on Hand	101 days	135 days	222 days	291 days	321 days
Debt to Operating Revenues (x)	3.2x	3.3x	2.8x	2.7x	2.6x

O&M reflects adjustments for non-cash adjustments for pensions and OPEB, as well as for depreciation. Debt service includes junior lien loans from the state.

Source: City of Seattle, WA, US Census Bureau and Moody's Investors Service

Profile

The water enterprise provides retail and wholesale water services to a combined population of 1.6 million within the greater Seattle metropolitan area. Water is primarily sourced from two watersheds east of the city, with infrastructure that includes 1,800 miles of pipelines and two treatment facilities, with high water quality supported by extensive watershed protection, advanced water treatment and ongoing monitoring.

Detailed credit considerations

Service area and system characteristics: key utility service provider to Seattle with ample supply

The utility system benefits from a strong service area economy that is beginning to rebound as vaccination rates increase and businesses begin to return to pre-pandemic levels of operations. The city is the commercial and tourist hub of the Puget Sound region and the economic center of the State of Washington. Software development and aircraft manufacturing are key components of the local economy, and the area serves as the headquarters of or major operating base to some of the world's most well-known international corporations, including [Amazon](#) (A2 positive), [Boeing](#) (Baa2 negative), [Microsoft](#) (Aaa stable), and [Starbucks](#) (Baa1 negative). Amazon and other technology firms have performed well during the pandemic by providing direct or enabling technologies

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that can capitalize on the broad "shelter in place" orders taking place across the country. Both business and leisure travel to the region remain significantly depressed, and general economic activity remains below pre-pandemic levels, though conditions have improved significantly. Preliminary unemployment data for February show the rate declined to 5.5%, which is much higher than the 2.1% in November 2019 prior to the pandemic but well below the April 2020 peak of 16.2%.

Income measures for the city are a credit strength. The city has one of the highest educational attainment rates in the country, along with some of the strongest income levels among large urban areas in the United States, with median family income at 162.9% of the US.

After falling over multiple decades, longer-term overall water consumption is expected to remain flat as population growth is offset by declines in per capita usage driven by the implementation of water conservation efforts, improved efficiency in fixtures, and increased residential density. Wholesale water represents slightly more than half of water demand (54% in 2020), followed by commercial use (26%), and residential (20%). In 2020 no single retail customer represented more than 2.0% of retail revenue, and the ten largest retail customers represent just 8.4% of overall retail revenue. The single largest wholesale customer, [Cascade Water Alliance](#) (Aa1), represented 8.2% of operating revenue in 2020.

Water supply comes from two surface sources (the Cedar River and the Tolt River) and one well field (Seattle Well Fields). Currently, these sources provide an average annual yield of 172 million gallons per day (MGD). The water system can store a combined approximately 320 million gallons of treated water within its distribution and transmission systems, predominantly in its 13 reservoirs, and the enterprise also has access to more than 130,000 acre-feet of raw water stored in the Cedar River and South Fork Tolt Watersheds (equal to roughly 42,345 MG, slightly more than the 40,594 billed in 2020). Given existing supply and demand forecasts, managers have determined that no significant new sources of water are necessary before 2060.

Debt service coverage and liquidity: coverage is solid and expected to remain healthy; liquidity bolstered by access to city's consolidated cash pool

Debt service coverage is solid and demonstrably stable. In 2020, debt service coverage on all debt, including low interest loans through the Washington State's Drinking Water State Revolving Fund, was a healthy 1.77x - in line with 2018 (1.81x) and 2019 (1.71x) (adjusted for non-cash pension and OPEB expenses). Even as the city and region struggled with the effects of the coronavirus pandemic, water revenue declined only 3% as residential activity increased but commercial activity declined; the change in consumption was within the range given hydrological variability, and total delinquencies past 90 days increased by about 1% for Seattle Public Utility's three lines of business collectively. Projected coverage through 2023 shows a modest decline due to rising O&M costs, though these projections are likely conservative.

Liquidity

Seattle's utilities have historically maintained low levels of cash on their own balance sheets. This is mitigated by their ability to access liquidity in the city's \$2.5 billion consolidated cash pool. Short-term liquidity (up to 90 days) can be accessed with approval of the city's finance director. For long-term liquidity, the enterprise must receive approval of the city council. The loans bear interest at the yield of the investment pool, which is low given the short-term investment nature. This cash management approach has been tested and demonstrated successful, with the city's electric enterprise borrowing in excess of \$100 million from the cash pool during the 2001 power crisis. The water system generates healthy operating cash flow. The enterprise ended 2020 with \$140.8 million of cash, or 321 days of cash on hand, a level Moody's views as strong. The forward projection for the enterprise shows significantly declining cash balances through 2023, though the city has historically outperformed similar projections by considerable margins. The impact of the coronavirus pandemic to the enterprise's financial liquidity has been extremely modest, as delinquencies of 90+ days increased by less than 1% of annual sales.

Debt and legal covenants: moderate debt with satisfactory legal

Most of the water enterprises's debt consists of senior lien revenue bonds. The city has seven outstanding loans with the state that are junior to the senior lien revenue bonds. Although the state loans contain language permitting acceleration in the event of default, the enforcement of these provisions is unlikely.

The water enterprise's capital improvement program through 2026 is just under \$600 million, a large portion of which (\$282 million) is for improvement of its distribution lines. The second largest portion falls under "Shared Cost Projects", including repairs related to transportation projects. The CIP is expected to be funded primarily by debt (\$467 million).

Legal security

The bonds are secured by a pledge of the net revenues of the water system. The city has covenanted to establish rates sufficient to generate debt service coverage of at least 1.25 times. The bonds are additionally secured by a common debt service reserve equal to the lesser of the standard three-prong test, funded by a combination of cash and sureties.

Debt structure

The water enterprise's debt consists of fixed rate obligations with declining debt service through final maturity in 2046.

Debt-related derivatives

The enterprise has no debt-related derivatives.

Pensions and OPEB

Pensions and other post-employment benefits are not a material driver for the water utility. According to our approach to analyzing pensions, the utility had an adjusted net pension liability at the end of 2020 of \$249.2 million, based on a discount rate of 3.22% (vs an assumed 7.25%). This is a very manageable 0.89 times operating revenue. Contributions have historically been very modestly below its "tread water" mark; that is, it is contributing slightly less than necessary to keep pension liabilities from growing, given plan assumptions.

Reported OPEB liabilities were just \$3.0 million at the end of 2020. The city satisfies its OPEB expenses on a pay-as-you-go basis, and the utility's share is limited to the implicit subsidy associated with retiree healthcare and is minimal.

ESG considerations

Environmental

Environmental considerations are an important consideration in the water enterprise's overall credit quality. The city has medium risk exposure to extreme rainfall, water stress and sea level rise, according to Moody's affiliate Four Twenty-Seven.

Social

Social considerations are an important factor in the water enterprise's overall credit quality. Resident income measures are among the highest in the nation for a large urban area. The coronavirus pandemic is also a factor under our ESG framework given its impact on public health and safety. While coronavirus is having a significant impact on the city's governmental finances, the public utilities have demonstrated significant financial stability.

However, the average monthly water bill in Seattle is high relative to many of its regional peers. This is similarly the case with the city's sewer and solid waste utilities, the result of which is a high composite utility rate for users and potentially constrained flexibility for individual utility rates. By 2026, the utility's strategic plan projects the typical monthly single-family residence to have a combined utility bill (excluding electricity) of \$244, while a typical monthly apartment residential bill will reach \$138.

To help with affordability, the city offers a discount program for qualifying low-income customers. In addition to direct customer assistance, the utility is looking at other steps to help bend the "cost curve" down over time, including making improvements to capital planning and delivery, expansion of partnership opportunities and improving regulatory alignment. The city has adopted legislation to assist customers affected by the coronavirus by enabling the utilities to waive interest on delinquent utility bills during the state of emergency. Although this may impact the utility's cash flow, as noted previously the utility has access to the city's large liquidity pool. Over time, the city's ability to manage affordability while satisfying regulatory and service-level needs will continue to be an important credit factor that Moody's will monitor moving forward.

Governance

Seattle's Public Utility governance is a credit strength. The city's management team has demonstrated its willingness and ability to generate additional revenue. Rates are set by city council and are not subject to state oversight. Under the public utility's current

strategic plan (adopted by the city council May 10, 2021), combined utility rates (including water, sewer, drainage and solid waste) are expected to increase by an average of 4.2% annually through 2026.

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